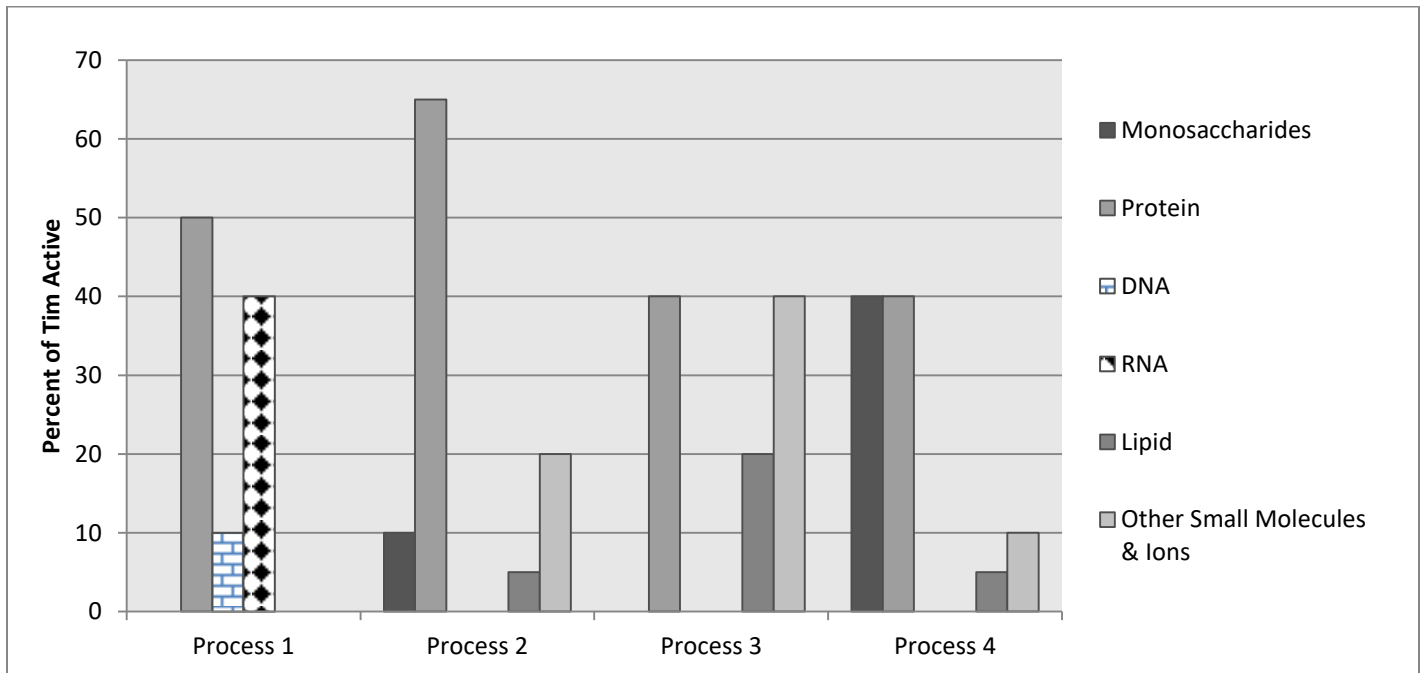


Name _____

Biomolecules...and beyond! FRQ Practice



The figure above shows 4 various cell processes, not necessarily occurring in the same cell. The relative percent of time each molecule was shown to be active in each process is represented.

1. State the likely process represented by Process 1. Justify your response.
2. Contrast the regulation & location(s) in the cell of Process 1 based on if the cell was prokaryotic or eukaryotic.
3. Assume Processes 2 and 3 represent pathways that transmit information in a cell. Contrast these 2 pathways based on the data.
4. Propose a likely process represented by Process 4 and justify your response.
5. Contrast the efficiency of Process 4 in a prokaryote cell versus a eukaryote cell. Justify your response.
6. Processes 2 and 4 contain the same molecules but in different proportions.
 - Predict a likely role of the Lipid component in each Process.
 - Explain how Process 4 is relevant to the other 3 Processes.
7. Assume that Process 1 and Process 2 are occurring in the same cell.
 - Predict a mutation type that would cause a significant impact on Process 2 and describe the possible impact.
 - Predict a mutation that would NOT cause a significant impact on Process 2 and describe why the impact would not be significant in contrast to your previous mutation impact.